

### **REMARKS**

The present invention provides a data collection system that enables a large number of participants, working in a particular field, to collectively develop valuable environmental data that can be disseminated to the participants through a royalty bearing system.

Thus, the collective effort of a number of different participants can shorten the cycle of determining, for example, optimum light irradiation conditions for a specific type of plant even though numerous parameters, including for example, a parameter such as light can be involved when the light emission, color range pattern, intensity, duration, the type of plant, environmental conditions of the plant, etc. that would require a large prolific effort if data was to be collected by an individual participant.

Our system promotes the use of such developed environmental data that can be widely distributed by a royalty payment incentive to the multiple subscribers or participants.

The environment of any invention for the field of optimum plant growth, can be seen in Figures 4 and 5 of our drawings to appreciate, in a schematic format, one embodiment of our invention.

Additionally, reference can be made to Page 23, Lines 4-24 to appreciate that our system is designed to be participatory and not simply a manner of generating royalties for only one source of information. Thus, fundamental data for the growth of a particular living organism, such as a plant, can be downloaded by anyone subscribing to the system. Additionally, fundamental base data can be equally distributed as a starting point for each assigned development project.

It is a purpose of our present invention to encourage innovation where the workload can be shared among different participants or subscribers and an incentive is provided in that a

royalty can be evaluated when effective new data is developed and has in fact been determined to be effective, whereby the fundamental data can be supplemented and updated at the cost of a royalty payment.

As a large number of participants are encouraged to develop new environmental data with the potential of having a large number of different parameters addressed by a large base of participants, it is possible to have rapidly developing improvements, for example in a growth of a specific plant or living organism. The parameters of different variables that effectively can promote the growth of a specific living organism, for example measuring CO<sub>2</sub>, humidity, temperature and even providing camera images, a video or sequential static pictures, can be provided to a second controlling system to conform those parameters that have been determined to be effective upon simply the payment of a royalty.

Our system further permits a proprietor of such information to even remain anonymous while evaluating an appropriate royalty that can be assured in payment before release of such data.

Thus, one of the purposes of our present invention is the collective utilization of multiple controlling systems that are encouraged to promote the growth or health of a living organism.

It is respectfully submitted that the cited combinations of references do not address nor recognize these advantages of our present invention.

The Office Action rejected Claims 40-59 as being obvious under 35 U.S.C. §103 over *Lys et al.* (U.S. Patent No. 6,577,080) in view of *Copenhaver et al.* (U.S. Patent Publication 2003/0131372).

It is the Examiner's burden to establish *prima facie* obviousness. See *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993) Obviousness requires a suggestion of all the elements in a claim (*CFMT, Inc. v. Yieldup Int'l*

*Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003)) and “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007). Here, we find that the Examiner has not identified all the elements of claim 1, nor provided a reason that would have prompted the skilled worker to have arranged them in the manner necessary to reach the claimed invention.

*Ex parte* Karoleen B. Alexander, No. 2007-2698, slip op. at 6 (B.P.A.I. Nov. 30, 2007)

The *Lys et al.* reference suggested numerous methods and systems for controlling lighting systems. As can be appreciated, *Lys et al.* is principally directed to providing an LED lighting control system which could be inserted into numerous different types of entertainment devices or even appliances such as telephones, display panels, toys, toothbrushes, articles of jewelry, airplane aisles, handrails, toilet seats, etc.

It would appear that the embodiment shown in Figure 34 would be of the closest interest because of a plant. However, Figure 34 is simply teaching a light strip of LEDs. It makes no reference to a plant.

The Office Action specifically identified the comparison views in Figures 92A and 92B wherein fruit-bearing plants can be subject to a plurality of LED light systems to promote growth in a greenhouse environment. Note, this is the only statement that could remotely be considered environmental data for a plant. The Office Action specifically identified a teaching of only lighting by LEDs in Column 62, Lines 50-67, which is as follows:

As an example, plant growth can be accelerated by precisely controlling the spectrum of light whereby a plurality of LED systems 2074 provide illumination to fruitbearing plants 2078 being grown in a greenhouse environment. The size and number of fruit 2030 on these plants 2078 are understood to compare advantageously to the results of the method illustrated in FIG. 92B, wherein the fruitbearing plans 2078 illuminated with natural light 2082 are observed to bear smaller and fewer fruits 2080. As a further example, cellular growth in culture can be improved by

illuminating the cells or the media with light having certain spectral qualities.

More specifically, the Office Action contended that this citation would teach multiple controlling systems that could promote growth or health of a living organism. More particularly, that it taught an information processing system that is communicatively connected to such a controlling system. Applicants respectfully traverse this interpretation.

Our claims define a condition data collecting system that incorporates multiple separate controlling systems that are directly linked in a network so they can collectively perform research and share, on the basis of a royalty incentive, incremental improvements over any fundamental environmental data that is available to all.

The disclosure relied upon in the Office Action for the *Lys et al.* reference simply recognizes that a so called smart light system of LEDs can be used in promoting plant growth. A person of ordinary skill in the field, presented with all of the different teachings of all the other embodiments in *Lys et al.*, would certainly not be led to believe that this could be the basis of a collective research effort by a number of different subscribers so that parallel experimentation on different parameters could be encouraged and rewarded. There is no teaching of any collective efforts by multiple participants to “improve an LED lighting system.”

In defining an invention, a difficulty arises in using a two-dimensional verbal definition to represent a three-dimensional invention. To provide protection to an inventor and notification to the public, a proper interpretation of terms utilized in the claims must be adhered to in order to enable an appropriate evaluation of the invention and its scope relative to cited prior art.

Thus, not only should the concept of the invention be found in the prior art, but further, any cited structural elements in a prior art reference should be performing the same function with

the same technical understanding to a person of ordinary skill in the field as the invention claims at issue.

The *Copenhaver et al.* was relied upon to teach that a royalty payment could be provided in licensing new technology associated with a genetic sequence for an agricultural product, citing Paragraph 0083. In essence, however, Paragraph 0083 simply affirms that a royalty payment system can take various forms, for example a portion of the sales, a one time payment, or a fixed fee paid on a regular basis, or having access to seeds for a new crop based on a mini chromosome including a sequence of centromere. See Paragraph 0082.

As defined in Paragraph 0087, the *Copenhaver et al.* inventors contended that only they had advanced the prior art by providing a nucleic acid sequence of plant centromeres, and more particularly, had provided, as noted in Paragraph 0096, methods of isolating and identifying centromere DNA sequences from total genomic DNA of an organism without genetic mapping of the plant. There is no suggestion of evaluating a royalty of multiple parties in a shared development network based on effective contributors of new environmental data.

As can be readily appreciated, there would be no teaching to a person of ordinary skill in the *Copenhaver et al.* as to incorporating a royalty bearing system for multiple controlling systems to promote a growth or health of a living organism, let alone teaching the accumulation of environmental data representative of variable parameters and growing conditions associated with a living organism that could supplement fundamental environmental data and be rewarded with a value determining royalty from other subscribers that wish to participate and contribute their relevant environmental data as part of a research condition data collecting system.

The availability of Internet search engines permits a ready searching of databases to find appropriate words. However, there is still a requirement, under the guidelines of the *KSR* case,

to provide an explicit analysis, not in hindsight from applicant's invention, not person of ordinary skill when presented with the entire teaching of the two cited references used in our current rejection, could not piece together aggregate and unrelated cited components, to assert that the present invention would simply be obvious to a person of ordinary skill in the field.

As noted in ex parte *Rinkevich et al.*, Appeal 207-1317, May 29, 2007 at Page 9:

We note that the U.S. Supreme Court recently reaffirmed that “[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautions of argument reliant upon *ex post* reasoning.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d at 1397. See also *Graham v. John Deere Co.*, 383 U.S. at 36, 148 USPQ at 474. Nevertheless, in *KSR* the Supreme Court also qualified the issue of hindsight by stating that “[r]igid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d at 1397. In the instant case, we conclude that a person of ordinary skill in the art *having common sense* at the time of the invention would not have reasonably looked to Wu to solve a problem already solved by Savill. Therefore, we agree with Appellants that the Examiner has impermissibly used the instant claims as a guide or roadmap in formulating the rejection.

In addition, applicants respectfully traverse the broad interpretation of our claim language in addition to Claim 40. For example, Claim 43 is purportedly taught by the *Copenhaver et al.* reference, apparently based on a statement that a royalty payment can take various forms such as a one time payment or a fixed fee payment, or a portion of sales associated with seeds for a crop. Our Claim 43 refers, in the context of our disclosure, to developing environmental data which can improve fundamental environmental data associated with growing conditions, not a centromere developed seed to enable cell division.

Our dependent Claim 44 is further asserted to be taught by *Lys et al.*, Column 42, Lines 11-20, which basically refers to a sign indicator with the use of a so called smart light bulb, for example where an EKG machine could be programmed to drive a smart light bulb in a nurses’

station, to produce different colors to indicate particular cardiac problems such as arrhythmia. Using a set of LEDs to change colors like a traffic light for alerting a nurse, certainly does not teach our present invention.

Claim 45 defines a royalty data being based on the content of only effective assessment data. However, the Office Action simply repeats the same warning panel light for a nurses' station.

Dependent Claim 46 refers to the ability for an identity of a participant in our controlling system to either be revealed or remain anonymous. The Office Action cites *Lys et al.*, Column 46, Lines 42-46 to simply define an ID badge that can be activated to determine whether a person is in an appropriate authorized area. Again, only hindsight can produced such a leap of logic.

Dependent Claim 47 was asserted to be taught by the *Lys et al.* teachings in Column 62, replicated above. Claim 47, however, calls for image data and examples are further provided in both our claims and the video camera Z1 shown in Figure 4 of our disclosure. Column 62 does not teach imaging any relevant living organism to produce the image data, which would be valuable to one of the multiple controlling systems to visualize any impact of the improved environmental data, for example on the plant growth with a picture.

The cited Column 62 from the *Lys et al.* reference simply recognizes that light can grow fruit. It does not suggest nor provide an image data of the fruit in the shared network of participating multiple controlling systems.

Dependent Claim 48 was rejected on the following from Column 54, Lines 34-40, of *Lys et al.*:

In one practice, the method can include providing an image capture system, wherein the image capture system is adapted for recording an image of the material. A practice of the method can include the steps of

determining the range of frequencies within the spectrum for illuminating the material, and controlling the LED system to generate the corresponding color within the spectrum. The material being illuminated by these methods can include a biological entity. The biological entity can include a living organism. A method of the disclosed invention can include the steps of selecting an illumination condition to be produced in the material, illuminating the material with a range of frequencies produced by the LED system, and selecting from the range of frequencies produced by the LED system a set of colors, whereby the set of colors produces in the material said illumination condition. A practice of the methods of this invention can include a further step of illuminating the material with the selected set of colors.

As can be seen above, we have replicated the entire context of the initial sentence and it is not referring to recording an image of the material, the material being the LED system and the image referring to the frequency of light to produce sets of colors for the illumination, and not for the purposes of a camera recording the results of improved environmental data.

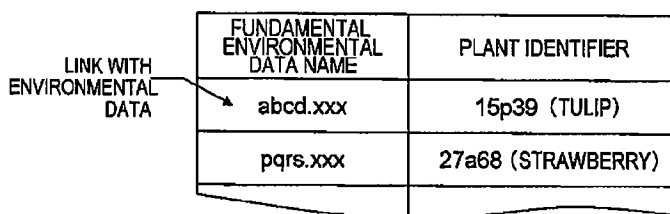
Dependent Claim 49 calls for a fundamental environmental data storing part that stores fundamental environmental data in advance and is provided in the context of providing the fundamental environmental data to each of the multiple controlling systems relative to a common living organism identified by identifier data.

This is certainly not taught by *Lys et al.* Column 11, Lines 10-13 as follows:

The light module 100 may also be provided with memory for storing instructions to control the processor 16, so that the light module 100 may act in stand alone mode according to pre-programmed instructions.

Dependent Claim 51 is contended to be taught by supplying the same lighting information signals for a plurality of lighting fixtures on a lighting track. However, environmental data is linked by identifiers as set forth, for example in Figure 9 of our drawings:





| FUNDAMENTAL ENVIRONMENTAL DATA NAME | PLANT IDENTIFIER   |
|-------------------------------------|--------------------|
| abcd.xxx                            | 15p39 (TULIP)      |
| pqrs.xxx                            | 27a68 (STRAWBERRY) |

FIG.9

Only a hindsight interpretation could conceivably be the basis for this rejection.

Dependent Claim 52 is contended to be taught by the disclosure of Figure 92A and the citation of Column 62, Lines 50-67. Again, a teaching that light assists in permitting plants to grow, does not address “measuring values in the environment of the living organism, including the relevant environment such as CO<sub>2</sub>, humidity, temperature, etc.

Applicant has provided an amendment to Claim 40 and dependent claims to further distinguish over the combination of references asserted.

In addition, newly drafted Claim 60 further defines multiple controlling systems and their interactions in sharing environmental data that is judged to meet a predetermined condition of effectiveness. Fundamental data is equally distributed and advances by individual participants can be evaluated and assigned a royalty value. The state data administering part provides effective state data subject to the royalty obligation to enable a second controlling system to conform its light conditions and to the data on the light irradiation from the first controlling system.

In view of the above comments and the amendments to the claims, it is believed that the application is now in condition for allowance and an early notification of the same is requested.

If the Examiner believes a telephone interview will assist in the prosecution of this matter, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

**SNELL & WILMER L.L.P.**



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